



Application report

SAFELY THROUGH THE WINTER

Partner SAC Sektion Emmental, Doldenhornhütte
Area Building technology

Building Technology

Monitoring

Alarm

Remote control

Partner

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ComatReleco products in operation

- CMS-10R - Messaging system



The romanticism of huts with mass accommodation and rustic sanitary facilities are definitely no longer in keeping with the times. Today's alpinist wants to be rewarded with adequate comfort after a completed performance. Mountain huts are adapting to the changing needs and upgrading their buildings with modern infrastructure.

The Doldenhornhütte above Kandersteg records 2500 overnight stays per year. In order to meet today's demands for comfort and space, the building is to be expanded in the coming years without increasing capacity. The manager of the hut already relies on automated monitoring of the technical infrastructure and its control from a distance.



Doldenhornhütte in winter. Certain functions have to be maintained all year round.



Rendering of the future extended Doldenhornhütte. The part that exists today will be integrated.

Functioning all year round

In winter, the Doldenhornhütte is not managed, but in good weather it can be used by snow hikers by appointment. Electricity is available thanks to a mains connection and it is possible to cook and heat.

Independent of the weather, various parts of the infrastructure are operated all year round without human intervention: A webcam continuously records images, a weather station records and forwards meteorological data, fire monitoring must

be guaranteed at all times. To monitor and control the technical systems, the hut manager and the tenant work with the CMS-10R messaging system from ComatReleco. Both have access to the recorded data via the IoT portal and can also intervene from the valley if necessary or are alerted in an emergency.

Since the grid is connected via an overhead line, power interruptions occur from time to time after avalanches or due to other external factors. In these cases, the responsible persons are notified and can remotely put the emergency generator into operation. It is even possible to simulate the scenario of a power failure and in this way play through certain problems in a dry run.

Expandable and future-proof

A major advantage of the CMS-10R messaging system is the ease with which additional components can be integrated into the system. This advantage will be fully utilised in the extension, which will be completed in four years.

In the future, solar collectors, hot water tanks, a photovoltaic system and the corresponding batteries will be additionally monitored and centrally managed.

All CMS-10R components – including existing ones – are continuously updated and are thus compatible with each other. All individual devices can be combined in an overall concept.

In this way, the consistent monitoring of various building parameters becomes clear and can be carried out comfortably and easily, even from a distance.